



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/885,436 | 06/18/2001 | Jason F. Hunzinger | 09752-091001 | 4227 |

27572 7590 07/12/2006

HARNESS, DICKEY & PIERCE, P.L.C.
P.O. BOX 828
BLOOMFIELD HILLS, MI 48303

EXAMINER

LY, NGHI H

ART UNIT PAPER NUMBER

2617

DATE MAILED: 07/12/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/885,436

Applicant(s)

HUNZINGER, JASON F.

Examiner

Nghi H. Ly

Art Unit

2617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _____ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02/09/06.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-34,39-43 and 117-128 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-34,39-43 and 117-128 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>03/27/06</u> . | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 2617

The Art Unit location of your application in the USPTO has changed. To aid in correlating any papers for this application, all further correspondence regarding this application should be directed to Art Unit 2617.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1-34, 39-43 and 117-128 have been considered but are moot in view of the new ground(s) of rejection.

Response to Amendment

2. Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 4, 9, 13, 18, 23, 24, 27, 29-31, 33, 39 and 117-128 are rejected under 35 U.S.C. 103(a) as being unpatentable over Borkowski et al (US 5,519,760) in view of Kageyama et al (US 6,246,932).

Regarding claims 1, 9, 18, 23, 29 and 39, Borkowski teaches a system for communicating information related to the position of a mobile station within a wireless communication infrastructure (see Abstract), comprising a data server capable of

Art Unit: 2617

communicating with the wireless communication infrastructure (see fig4, server 49 and wireless connection with the mobile station), wherein the mobile station and the data server communicate via the wireless communication infrastructure using formatted messages wireless communication infrastructure state information related to the position of the mobile station within the service area of the wireless communication infrastructure (see column 1, lines 29-58).

Borkowski does not specifically disclose the formatted messages containing a difference between previous and current wireless communication infrastructure state information.

Kageyama teaches the formatted messages containing a difference between previous and current wireless communication infrastructure state information (column 18, lines 38-43).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teaching of Kageyama into the system of Borkowski so that the traveling speed and direction maybe detected directly by deploying speed sensor (see Kageyama, column 18, lines 49-51).

Regarding claims 4 and 27, Borkowski further teaches the mobile station is a cellular telephone (fig.4, see mobile station).

Regarding claim 24, Borkowski further teaches the mobile station communicates the message to a base station (see fig4, server 49 and wireless connection with the mobile station).

Regarding claim 13, Borkowski further teaches the mobile station communicates via the base station the formatted messages to an application or service on the data server (see fig4, server 49 and wireless connection with the mobile station).

Regarding claim 30, Borkowski further teaches the data server communicates with a base station (see fig4, server 49 and wireless connection with the mobile station).

Regarding claim 31, Borkowski further teaches the base station communicates with the mobile station (see fig4, server 49 and wireless connection with the mobile station).

Art Unit: 2617

Regarding claim 33, Borkowski further teaches a network database correlated with position information (see column 8, lines 22-27).

Regarding claim 117, Borkowski teaches a system for communicating information related to the position of a mobile station within a wireless communication infrastructure (see Abstract). Borkowski does not specifically disclose the difference between the previous and the current wireless communication infrastructure state information is related to the present position of the mobile station.

Kageyama teaches the difference between the previous and the current wireless communication infrastructure state information is related to the present position of the mobile station (column 18, lines 38-43).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teaching of Kageyama into the system of Borkowski so that the traveling speed and direction maybe detected directly by deploying speed sensor (see Kageyama, column 18, lines 49-51).

Regarding claim 118, Borkowski teaches a system for communicating information related to the position of a mobile station within a wireless communication infrastructure (see Abstract). Borkowski does not specifically disclose the difference between the previous and the current wireless communication infrastructure state information is determined from the previous wireless communication infrastructure state information cached in the mobile station.

Kageyama teaches the difference between the previous and the current wireless communication infrastructure state information is determined from the previous wireless communication infrastructure state information cached in the mobile station (column 18, lines 38-43).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teaching of Kageyama into the system of Borkowski so that the traveling speed and direction maybe detected directly by deploying speed sensor (see Kageyama, column 18, lines 49-51).

Regarding claims 119, 121, 123, 125 and 127, Borkowski teaches a system for communicating information related to the position of a mobile station within a wireless communication infrastructure (see Abstract). Borkowski does not specifically disclose the difference between the previous and the current mobile station position informations is related to the present position of the mobile station.

Kageyama teaches the difference between the previous and the current mobile station position informations is related to the present position of the mobile station (column 18, lines 38-43).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teaching of Kageyama into the system of Borkowski so that the traveling speed and direction maybe detected directly by deploying speed sensor (see Kageyama, column 18, lines 49-51).

Regarding claims 120, 122, 124, 126 and 128, Borkowski teaches a system for communicating information related to the position of a mobile station within a wireless communication infrastructure (see Abstract). Borkowski does not specifically disclose the difference between the previous and the current mobile station position information is determined from the previous mobile station position information cached in the mobile station.

Kageyama teaches the difference between the previous and the current mobile station position information is determined from the previous mobile station position information cached in the mobile station (column 18, lines 38-43).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teaching of Kageyama into the system of Borkowski so that the traveling speed and direction maybe detected directly by deploying speed sensor (see Kageyama, column 18, lines 49-51).

5. Claims 2, 11, 22, 26 and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Borkowski et al (US 5,519,760) in view of Kageyama et al (US 6,246,932) and further in view of Rantalainen et al (US 6,667,963).

Regarding claims 2, 11, 22, 26 and 43, the combination of Borkowski and Kageyama teaches claim 1. The combination of Borkowski and Kageyama does not specifically disclose the formatted messages are short message service (SMS) messages.

Rantalainen teaches the formatted messages are short message service (SMS) messages (see column 6, lines 7-11).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teaching of Rantalainen into the system of Borkowski and Buerger in order to provide an alternative way to transmit location data.

6. Claims 3, 10, 14, 15, 21, 25, 34 and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Borkowski et al (US 5,519,760) in view of Kageyama et al (US 6,246,932) and further in view of Linden et al (US 6,549,773).

Regarding claims 3, 10, 21, 25, 34 and 42, the combination of Borkowski and Kageyama teaches claim 1. The combination of Borkowski and Kageyama does not specifically disclose the wireless communication infrastructure uses code division multiple access.

Linden teaches the wireless communication infrastructure uses code division multiple

Art Unit: 2617

access (see column 1, lines 30-33).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teaching of Linden into the system of Borkowski and Buerger in order to permit channel overlap between base stations.

Regarding claims 14 and 15, the combination of Borkowski and Kageyama teaches claim 1. The combination of Borkowski and Kageyama does not specifically disclose the application or service on the data server is the Wireless Markup Language Script (WMLScript).

Linden teaches the application or service on the data server is the Wireless Markup Language Script (WMLScript) (see column 5, lines 11-15).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teaching of Linden into the system of Borkowski and Kageyama in order to provide binary encoded for optimum transmission efficiency.

7. Claims 5 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Borkowski et al (US 5,519,760) in view of Kageyama et al (US 6,246,932) and further in view of Falco et al (US 6,493,539).

Regarding claims 5 and 28, the combination of Borkowski and Kageyama teaches claim 1. The combination of Borkowski and Kageyama does not specifically disclose the mobile station is a PCS handset.

Falco teaches the mobile station is a PCS handset (see column 1, lines 14-17).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teaching of Falco into the system of Borkowski and Kageyama in order to prevent call termination due to interference.

Art Unit: 2617

8. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Borkowski et al (US 5,519,760) in view of Kageyama et al (US 6,246,932) and further in view of Kong (US 6,275,186).

Regarding claim 6, the combination of Borkowski and Kageyama teaches claim 1. The combination of Borkowski and Kageyama does not specifically disclose the state information related to the position of the mobile station includes a base station identification and sector pseudo-noise offset.

Kong teaches the state information related to the position of the mobile station includes a base station identification and sector pseudo-noise offset (see column 3, lines 31-38).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teaching of Kong into the system of Borkowski and Kageyama in order to provide an alternative way to determine the location of the mobile station.

9. Claims 7, 8, 12, 16, 20 and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Borkowski et al (US 5,519,760) in view of Kageyama et al (US 6,246,932) and further in view of Official Notice.

Regarding claims 7, 8, 12, 16, 20 and 41, the combination of Borkowski and Kageyama teaches claims 1, 9, 18, 23, 29, and 39, the combination of Borkowski and Kageyama does not specifically teach the state information is in the form of a standard string format or the more critical information is listed first in the string or the formatted messages are browser calls or the formatted message is a text string or placing the more important information at the beginning of the formatted message as claimed.

However, the Examiner takes Official Notice that state information is in the form of a standard string format or the more critical information is listed first in the string or the formatted

Art Unit: 2617

messages are browser calls or the formatted message is a text string or placing the more important information at the beginning of the formatted message as claimed are very well known in the art.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teaching of Borkowski and Kageyama as claimed in order to improve the state information is in the form of a standard string format or the more critical information is listed first in the string or the formatted messages are browser calls or the formatted message is a text string or placing the more important information at the beginning of the formatted message.

10. Claims 17, 19, 32 and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Borkowski et al (US 5,519,760) in view of Kageyama et al (US 6,246,932) and further in view of Chiang et al (US 6,741,863).

Regarding claim 17, the combination of Borkowski and Kageyama teaches claims 9. The combination of Borkowski and Kageyama does not specifically disclose the mobile station position information is derived from base station identification.

Chiang teaches the mobile station position information is derived from base station identification (see column 2, lines 31-37).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teaching of Chiang into the system of Borkowski and Kageyama in order to provide an alternative way to determine the location of the mobile station.

Regarding claims 19 and 40, the combination of Borkowski and Kageyama teaches claims 9. The combination of Borkowski and Kageyama does not specifically disclose detecting the base station identification information to determine the position information.

Chiang teaches detecting the base station identification information to determine the position information (see column 2, lines 31-37).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teaching of Chiang into the system of Borkowski and Kageyama in order to provide an alternative way to determine the location of the mobile station.

Regarding claim 32, the combination of Borkowski and Kageyama teaches claims 9. The combination of Borkowski and Kageyama does not specifically disclose the position information is used to determine appropriate data to transmit back to the mobile station.

Chiang teaches the position information is used to determine appropriate data to transmit back to the mobile station (see column 2, lines 31-37 and see column 3, line 61 to column 4, line 23).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teaching of Chiang into the system of Borkowski and Kageyama in order to provide an alternative way to determine the location of the mobile station.

Conclusion

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

Art Unit: 2617


shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nghi H. Ly whose telephone number is (571) 272-7911. The examiner can normally be reached on 8:30 am-5:30 pm Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nick Corsaro can be reached on (571) 272-7876. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Nghi H. Ly



CHARLES APPIAH
PRIMARY EXAMINER